



## Cosmeceuticals: New Medicine for Beauty

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### Abstract:-

Cosmeceuticals is a new category of products placed between cosmetics and pharmaceuticals that are used for the enhancement of both the health and beauty of skin. Cosmeceuticals means combination of cosmetics and pharmaceuticals. Cosmeceuticals are cosmetic products with biologically active ingredients purporting to have medical or drug like benefits. Cosmeceuticals are used to improve and nourish the skin appearance and known to treat different dermatologic conditions. Like cosmetics, cosmeceuticals are also applied topically having ingredients that influence the skin's biological function.

Cosmeceuticals are meant to improve appearance by delivering nutrients necessary for healthy skin. Cosmeceuticals usually claim to reduce wrinkles and to improve tone, texture and radiance of the skin.

**KEYWORDS:** Sunscreen, Peptides, Boswellic Acid, Antioxidant, Baco peptides

### Introduction:-

Cosmeceuticals affects the biological functioning of the skin (medicinal or drug like benefits) depending upon the ingredients present in them. Cosmeceuticals increases the collagen growth in the skin and reduces the harmful effects of free radicals thus maintain the structure of keratin in good condition and making the skin healthier. Cosmetics include skincare creams, lotions, powders, perfumes, lipsticks, fingernail and toe nail polish, eye and facial makeup. Towelettes, permanent waves, colored contact lenses hair colors, hair sprays and gels, deodorants, hand sanitizer, baby products, bath oils, bubble, butters and many other types of products. A subset of cosmetics is called "make-up" which refers mainly to the colored products use to change the user's appearance. (1)

Cosmeceuticals is the mixture of cosmetics and pharmaceuticals. The term cosmeceuticals refer to the substances that exerted both cosmetic and therapeutic benefits. Cosmeceuticals are cosmetic products with biologically active ingredients which have medical or drug-like benefits. (2)

Cosmeceuticals are formulated from a multitude of ingredients, the main categories of which are discussed in this article. It is important that physicians recognize these agents and understand their benefits, limitations, and potential adverse effects.

## Various innovative terms for cosmeceuticals are being introduced:-

- Beauty supplements
- Skinceuticals
- Bio-active cosmetics
- Performance cosmetics
- Phytocosmetics
- Functional cosmetics
- Dermaceuticals
- Cosmetic drugs
- Therapeutic cosmetics (3)

Like cosmetics, cosmeceuticals are also applied topically; they contain ingredients which influence the skin's biological function. Cosmeceuticals are meant to improve appearance by delivering nutrients essential for healthy skin. Cosmeceuticals usually claim to reduce wrinkles and to improve tone, texture and radiance of the skin. Cosmeceuticals is the fastest-growing segment of the natural personal care industry.(4)

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Cosmetics and cosmeceuticals are tested only for safety. Efficacy testing is not compulsory. Cosmeceuticals include most of the bioactive food components such as milk peptides certain vitamins and minerals, phytonutrients from herbs, various oils and botanical extracts.

### History:-

Cosmetics are an integral part of Egyptian hygiene and health. Men and women in Egypt use scented oils and ointments to clean and soften their skin and mask body odor. Oils and creams are used for protection against the hot Egyptian sun and dry winds. Myrrh, thyme, marjoram, chamomile, lavender, lily, peppermint, rosemary, cedar, rose, aloe, olive oil, sesame oil, and almond oil provide the basic ingredients of most perfumes Egyptians use in religious rituals. The Chinese stain their fingernails with gum arabic, gelatin, beeswax, and egg. The colors are used as a representation of social class:

Chinese and Japanese citizens commonly use rice powder to make their faces white.

Henna is used in India both as a hair dye and in mehndi, an art form in which complex designs are painted on the hands and feet using a paste made from the henna plant, especially before a Hindu wedding. Henna is also used in

some North African cultures.

Italy and France emerge as the main centers of cosmetics manufacturing in Europe, and only the aristocracy has access. Arsenic is sometimes used in face powder instead of lead. In 2002, the well-known cosmetics company L'Oreal and the food manufacturing giant, Nestlé joined forces to create Innéov, a company established to formulate and market nutritional supplements for beauty benefits.

## CLASSIFICATION OF COSMECEUTICALS (5)

1. skin care 2. Hair care 3. Colour 4. Fragrance
5. Toiletries 6. Others

### 1. SKIN CARE COSMECEUTICALS:-

Cosmetics and skin care products have become the part of everyday grooming of the people. It is essential to protect and preserve the skin for good health. Our skin, which is the largest organ of the body acts by separating and protecting the internal environment from the external one. UV radiations coming from the sunlight penetrate the skin and accelerated damage due to free radicals, which consist of wrinkling, inflammation and hyper pigmentation. The collagen and elastin fibres of the skin due to prolonged exposure to UV radiation are broken down by enzymes collagenase and elastase and thus the texture of skin deteriorates. Collagen and elastin are responsible for maintaining the elasticity and integrity of the skin. Numerous plant extracts and antioxidants that are obtained from natural sources are able to prevent the aging and also improving the appearance of the skin (6). The following ingredients are most commonly used in cosmeceuticals. :

1. Boswellic Acid.
2. Tetra-hydrocuraminoid.
3. Hydroxy acids (7)
4. Vitamins (8) Vitamins play a vital role in cosmeceuticals name of some vitamins are as follows:-  
Vitamin A, Vitamin B<sup>3</sup> and B<sup>5</sup>, Vitamin C, Vitamin P...
5. Panthanol (alcoholic analog of vit. B)
6. Green tea extract, Ferulic acid, Grape seed extract (9)

### MAJOR CLASSES OF COSMECEUTICALS:-

Major Classes of Cosmeceuticals are as follows

#### 1. Sunscreens:-

These are considered as OTC drugs: sun protection factor must be proven by in-vitro and in-vivo studies. These are regarded by dermatologists as the single most important formulation that should be applied daily. These are the products formulated to meet individual preferences, such as scent and feel can improve compliance.

## 2. Retinoids:-

These are the natural and synthetic derivatives of vitamin A. Retinoids: retinoic acid (tretinoin). Adapalene and tazarotene. Substantial scientific data confirm their anti-aging and anti-acne benefits. Retinoic acid is considered by dermatologists to be the anti-aging gold standard. These are available only through a doctor's prescription.

## 3. Moisturizer:-

Moisturizer includes emollients, occlusives, and humectants. They are considered to be the most useful product for the management of various skin conditions (e.g. atopic dermatitis, psoriasis, pruritus, aging skin).

## 4. Antioxidant:-

They enhance the skin's natural antioxidant protection system with topical application. They reduce free-radical damage by blocking the oxidative processes in cells. Antioxidants inhibit inflammation that causes collagen depletion. They protect against photo damage and skin cancer.

## 5. Proteins/ Peptides:-

They can trigger skin repair as needed. There are some indications that they can reduce the signs of aging and accelerate the skin's healing processes.

## 6. Other vitamins and Minerals..

Recently, the market is swamped with too many cosmeceuticals products like anti wrinkle creams, medicated lotions, hair growth stimulants, antidandruff shampoos, eye wrinkle creams, collagen injections, etc.(10)

## HAIR CARE COSMECEUTICALS:-

The appearance of hair is a feature of the body over which humans, unlike other land mammals, has direct control. The length, color and the style of the hair can be modified according to one's wish to appear. Styling of hair along with its color plays a vital role in the appearance of people. In ancient times the setting and coloring of hair was done with the help of mud and henna resp. various tonics and ointment for beautification of hair and for curing scalp disease were used in ancient Greece and Rome. Henry de Mandeville first made the distinction between the medical therapies intended for treatment of disease and cosmetic agent for beautification.(11) But today's delineation of cosmetics from pharmaceuticals has become more complex through the development of cosmetics with physiologically active ingredients, i.e. cosmeceuticals. By far the most frequent form of cosmetic hair treatment is shampooing. While shampoos have primarily been products aimed at cleaning the hair and scalp, recent formulations are modified to the variations associated with hair quality, hair care habit, and specific problems such as treatment of oily hairs (12)

Shampooing is the most frequent form of hair treatment. Current shampoo formulations contain ingredients that can treat specific problems. Extract of yarrow (*Achillea millefolium* L), has been used to treat oily hair. A hair cosmeceuticals product includes conditioning agents, special care ingredients and hair growth stimulants.

### COLOUR COSMECEUTICALS:-

Colour is a key property of a product to determine the attractiveness for consumers and, therefore, its successful marketing. Colouring agents can be added to cosmetics in order to colour the product itself or to colour a part of the body (skin, hair, nails or eyelashes). In this latter case, the so-called colour cosmetic is a sector with a strong growth in the industry of cosmetics, given the increasing concern with body image motivated by the popularity of social media (13)

According to their use, cosmetics can be classified as leave-on, those that are in prolonged contact with the skin such as lipstick, cream or body lotion, and rinse-off, those that are removed after application such as shampoo, gel or soap. Colorants can be classified according to their structure, source, colour, solubility and application method (14)

### **CURRENT COSMECEUTICALS COMPOUNDS AVAILABLE:-**

**Bo-Peptide Eye Cream**—An HCG diet friendly mixture of various peptides and glycosaminoglycans along with the Lipo Light light reflecting technology. **Anti-Aging Eye Cream**—Powerful mixture of the anti-oxidants melatonin and Idebenone in Glycine Soya Protein solution, designed to restore youthful texture to skin.

#### **Bacopeptide Anti-Aging—**

HCG diet friendly formulation of Bacopa Monnieri extract, acetyl dipeptide and gluconolactone in vanishing cream. **Collagen Booster Lotion**—HCG diet friendly formula to improve and restore skin matrix contains Palmitoylpentapeptide, glycine soya protein, kinetin and glycosaminoglycans.

#### **Eye Wrinkle Gel—**

HCG diet friendly formula designed to provide maximum moisture to support skin matrix contains Sodium Hyaluronate, DMAE, Acetyl D Glucosamine and glycine soya protein. Ask pharmacists to help you decide which formulas are best for your skin care need

### **CONCLUSION:**

Cosmeceuticals offer both challenges and rewards to patients and their physicians. As society holds a youthful and healthy appearance to be of utmost importance, many people feel anxious about their aging skin and seek physician advice on what to do.

Helping patients understand the degree of improvement that can realistically be achieved as well as potential side effects remains the primary responsibility of the physician with regard to these products. Many of the new cosmeceuticals in development sound very exciting, but the physician's concern is to help patients choose the best products available today.



Some experts recommend that physicians pick one or two products with which they have experienced good results and advise their patients on how to incorporate them into their daily skin regimen--always reminding patients that even a safe product can evoke redness, cause irritation, or clog pores if used inappropriately.

As technology advances and cosmeceuticals continue to become more sophisticated and more widely used, the medical profession must continue to take an active role in familiarizing themselves with these products and in educating patients about the benefits and risks of cosmeceuticals.

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